

§ 86.1910

40 CFR Ch. I (7–1–08 Edition)

in § 86.1920. We may allow you to replace the rejected vehicle with another candidate vehicle to meet your testing requirements for the specific engine family.

(d) You must report when, how, and why you reject candidate vehicles, as described in § 86.1920.

§ 86.1910 How must I prepare and test my in-use engines?

(a) You must limit maintenance to what is in the owners manual for engines with that amount of service and age. For anything we consider an adjustable parameter (*see* § 86.094–21(b)(1)(ii) and § 86.094–22(e)), you may adjust that parameter only if it is outside of its adjustable range. You must then set the adjustable parameter to the mid-point of its adjustable range or your recommended setting, unless we approve your request to do otherwise. You must receive permission from us before adjusting anything not considered to be an adjustable parameter. You must keep records of all maintenance and adjustments, as required by § 86.1925. You must send us these records, as described in § 86.1920(b)(3)(x), unless we instruct you not to send them.

(b) You may treat a vehicle with an illuminated MIL or stored trouble code as follows:

(1) If the length of MIL illumination or trouble code storage is consistent with proper maintenance and use, either test the prospective test vehicle as received or repair the vehicle before testing. If you elect to repair the vehicle/engine, but ultimately determine that repairs cannot be completed in a timely manner, you may reject the vehicle from the test program and replace it with another vehicle. If you repair or reject the vehicle, you must describe the MIL or trouble code information in your report under § 86.1920.

(2) If the length of MIL illumination or trouble code storage is inconsistent with proper maintenance and use, either test the prospective test vehicle as received, repair the vehicle before testing, or reject the vehicle from the test program and replace it with another vehicle. If you repair or reject the vehicle, you must describe the MIL or trou-

ble code information in your report under § 86.1920.

(3) If a MIL is illuminated or a trouble code is set during an in-use test, do one of the following:

(i) Stop the test, repair the vehicle, and restart the testing. In this case, only the portion of the full test results without the MIL illuminated or trouble code set would be used in the vehicle-pass determination as described in § 86.1912. Describe the MIL or trouble code information in your report under § 86.1920.

(ii) Stop the test, repair the vehicle, and initiate a new test. In this case, only the post-repair test results would be used in the vehicle-pass determination as described in § 86.1912. Describe the MIL or trouble code information in your report under § 86.1920.

(iii) If three hours of non-idle operation have been accumulated prior to the time a MIL is illuminated or trouble code set, stop the test and use the accumulated test results in the vehicle-pass determination as described in § 86.1912.

(iv) If three hours of non-idle operation have not been accumulated prior to the time a MIL is illuminated or trouble code is set, and you elect to repair the vehicle/engine, but ultimately determine that repairs cannot be completed in a timely manner, you may reject the vehicle from the test program and replace it with another vehicle. If you repair or reject the vehicle, you must describe the MIL or trouble code information in your report under § 86.1920.

(c) Use appropriate fuels for testing, as follows:

(1) You may use any diesel fuel that meets the specifications for No. 2–D S500 or No. 2–D S15 in ASTM D 975 (incorporated by reference in § 86.1), as required in the calendar year that in-use testing occurs.

(2) You may use any biodiesel fuel blend that is either expressly allowed or not otherwise indicated as an unacceptable fuel in the vehicle's owner or operator manual or in the engine manufacturer's published fuel recommendations.

(3) You may drain a prospective test vehicle's fuel tank(s) and refill the tank(s) with diesel fuel conforming to

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ASTM D 975 specifications described in paragraph (c)(1) of this section.

(4) Any fuel that is added to the fuel tank(s) of a prospective test vehicle, or during an in-use test, must be purchased at a local retail establishment near the site of vehicle procurement or screening, or along the test route. Alternatively, the fuel may be drawn from a central fueling source, provided that the fuel used is representative of that which is commercially available in the area where the vehicle is operated.

(5) No post-refinery fuel additives are allowed, except that one or more specific fuel additives may be used during in-use testing if you can document that the owner/operator of the prospective test vehicle has a history of normally using the fuel treatment(s), and the fuel additive(s) is not prohibited in the vehicle's owner or operator manual or in the engine manufacturer's published fuel-additive recommendations.

(6) You may take fuel samples from test vehicles to ensure that appropriate fuels were used during in-use testing. If a vehicle fails the vehicle-pass criteria and you can show that an inappropriate fuel was used during the failed test, that particular test may be voided. You may drain the vehicle's fuel tank(s) and refill the tank(s) with diesel fuel conforming to the ASTM D 975 specifications described in paragraph (c)(1) of this section. You must report any fuel tests that are the basis of voiding a test in your report under §86.1920.

(d) You must test the selected engines while they remain installed in the vehicle. Use portable emission-sampling equipment and field-testing procedures referenced in §86.1375. Measure emissions of THC, NMHC (by any method specified in 40 CFR part 1065, subpart J), CO, NO_x, PM (as appropriate), O₂, and CO₂.

(e) For Phase 1 testing, you must test the engine under conditions reasonably expected to be encountered during normal vehicle operation and use consistent with the general NTE requirements described in §86.1370-2007(a). For the purposes of this subpart, normal operation and use would generally include consideration of the vehicle's normal routes and loads (including

auxiliary loads such as air conditioning in the cab), normal ambient conditions, and the normal driver.

(f) For Phase 2 testing, we may give specific directions, as described in §86.1915(c)(2).

(g) Once an engine is set up for testing, test the engine for at least one shift-day. To complete a shift-day's worth of testing, start sampling at the beginning of a shift and continue sampling for the whole shift, subject to the calibration requirements of the portable emissions measurement systems. A shift-day is the period of a normal workday for an individual employee. If the first shift-day of testing does not involve at least 3 hours of accumulated non-idle operation, repeat the testing for a second shift-day. If the second shift-day of testing also does not result in at least 3 hours of accumulated non-idle operation, you may choose whether or not to continue testing with that vehicle. If after two shift-days you discontinue testing before accumulating 3 hours of non-idle operation on either day, evaluate the valid NTE samples as described in §86.1912 and include the data in the reporting and record keeping requirements specified in §§86.1920 and 1925. Count the engine toward meeting your testing requirements under this subpart and use the data for deciding whether additional engines must be tested under the applicable Phase 1 or Phase 2 test plan.

(h) You have the option to test longer than the two shift-day period described in paragraph (g) of this section.

(i) You may count a vehicle as meeting the vehicle-pass criteria described in §86.1912 if a shift day of testing or two-shift days of testing (with the requisite non-idle/idle operation time as in paragraph (g) of this section), or if the extended testing you elected under paragraph (h) of this section does not generate a single valid NTE sampling event, as described in §86.1912(b). Count the engine towards meeting your testing requirements under this subpart.

(j) You may ask us to waive measurement of particular emissions if you can show that in-use testing for such emissions is not necessary.